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PHASE OUT OF SINGLE HULL TANKERS AND RELATED ISSUES
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INTRODUCTION

Mr. Chairman, and distinguished Members of the Committee, I am Timothy Keeney, Deputy Assistant Secretary of Commerce for Oceans and Atmosphere. On behalf of NOAA Administrator Vice Admiral Conrad C. Lautenbacher, Jr., USN (ret), thank you for this opportunity for NOAA to testify on recent oil spills, the phase out of single hull tankers, and related issues. The United States Coast Guard (USCG) and Environmental Protection Agency (EPA) are charged with executing many vessel-related laws and regulations, so I will respectfully defer to Assistant Commandant of the Coast Guard, Rear Admiral Pluta, and Deputy Director of EPA, Elaine Davies, on some of these issues. After some introductory remarks, I will discuss NOAA's efforts following the recent PRESTIGE tanker disaster off the coast of Spain, and NOAA's role in marine oil spill prevention, preparedness, response and restoration.

Approximately 70 percent of imported oil used by the United States is shipped by tanker. At any given time, oil, petroleum products, and other hazardous materials account for about half of all cargo in transit upon U.S. waters, most of it in tankers or tank barges. NOAA's principal concern regarding tankers is the impact of spills on the ocean and coastal environment, including habitat and living marine resources. NOAA is a steward and trustee of many of the Nation's coastal and marine resources pursuant to the Oil Pollution Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Marine Mammal Protection Act, the National Marine Sanctuaries Act, and other laws. NOAA has a strong interest in vessel activities because of its marine stewardship responsibilities and has some capability to regulate vessels under these authorities, depending on actual or potential impacts on NOAA's trust resources. Having such broad stewardship responsibilities also creates an incentive for NOAA to work closely with sister agencies that have more direct regulatory responsibilities over maritime activities. Two agencies that we coordinate with are the Coast Guard and EPA.

Two recent events that resulted in major oil spills off the coast of Europe demonstrate the difficult issues presented by major oil spills from oil tankers. First, both tankers were old. The tanker, PRESTIGE, which recently broke apart off the coast of Spain, was 26 years old. The

ERIKA was about 24 years old when it broke apart off the coast of France in 1999. The average age of a tanker in the global tanker fleet at the beginning of 2002 was 18.2 years¹. Second, both vessels were single hull tankers, as are the majority of the estimated 9,716 tankers of 300 gross tons and over operating globally². Third, both PRESTIGE and ERIKA broke apart during fierce storms. Fourth, international shipping typically involves a host of actors, which can make it difficult to determine the responsible party in the event of an oil spill. For example, the PRESTIGE was a Japanese-built ship, owned by a company registered in Liberia, managed by a Greek firm, registered in the Bahamas, certified by an American organization, and chartered by a Swiss-based Russian trading company. Finally, PRESTIGE was traveling neither to nor from a European Union port. Port State control offers an important mechanism for a country to impose regulations on ships; however, it is extremely difficult (if not impossible) to do so for ships merely in transit past a Nation's coast.

The global nature of the maritime transport industry presents a strong argument for a uniform set of environmental and safety rules. A diverse array of unilateral regulatory approaches could contribute to increased costs for the tanker industry and ultimately for national economies and consumers. Uniform rules allow for the efficient, economic conduct of business and creates a level playing field among the participants. However, agreeing to and approving uniform rules through the International Maritime Organization (IMO) can take considerable time to accomplish, and since IMO works primarily by consensus, a country may not achieve its desired outcome through the IMO process. The bottom line is that nations (and their political subdivisions) directly impacted by major spills inevitably face heavy pressure to take rapid and decisive action. A nation may decide that domestic legislation is the best way to protect its interests.

Double hulls can provide an added measure of safety, but shifting to double hull tankers is not a panacea. Even as we phase out single hull tankers, we must remain vigilant in providing state-of-the-art navigation data and other preventive and preparedness services. We also must recognize other significant oil pollution threats to public health, commerce, and the marine environment from other aging infrastructure, including pipelines, shore-side facilities, and non-tank vessels. We should also recognize and prepare for the future when double hull tankers become older and consequently, are at an increased risks for spills..

A particular concern today is maritime acts of terror. Events like the October 2002 explosion that rocked the Yemen-bound French tanker, LIMBURG, breached both hulls of a new, double-hulled ship, penetrating about 24 feet into the cargo hold. I commend Congress, and particularly Members of this Committee, for recognizing the vulnerability of our ports and coastal communities by passing the Maritime Transportation Security Act of 2002, which President Bush signed the same day that he signed into law the Homeland Security legislation.

¹ See <http://www.isl.org/english/public/shortcommentno3-e.htm>

² Id.

I would be remiss if I did not mention that spills are not the only threat to marine resources from petroleum products. The amount of oil deposited in the coastal waters of the United States from urban runoff, highways and related sources greatly exceeds deposits from the transportation of oil. While the impacts of a major spill can be dramatic, these deposits also present a serious and complex challenge and will continue regardless of ongoing efforts to curb marine disasters from tankers. In addition, natural seepage of crude oil is another significant source of oil in the marine environment, although this natural seepage tends to occur sporadically and at low rates. Devoting attention to distinguishing the effects of petroleum released by natural processes versus anthropogenic activities would greatly aid in understanding crude oil behavior in the marine environment, and how marine life responds to the introduction of petroleum.

The remainder of my testimony will summarize the support NOAA has provided in response to the PRESTIGE catastrophe and then I will update the Committee on NOAA programs and responsibilities in the areas of spill Prevention, Preparedness, Response, and Restoration.

NOAA AND THE PRESTIGE SPILL

NOAA offered expert (knowledge only, not products) assistance to Spain after the PRESTIGE sank. Spain accepted and NOAA sent four people to Spain a few days later: two experts in cleanup measures and general organization of information during a spill, a fisheries expert and a damage assessment economist. The U.S. Coast Guard also sent one person with this team from their Gulf Strike Team. The first team was in Spain for two weeks, providing clean-up guidance, helping to prioritize cleanup areas, visiting beaches, and writing reports. When they rotated out, two more NOAA employees, a marine biologist and a cleanup expert, took their place.

Three weeks after accepting our original offer of assistance Spain requested a trajectory expert to help them set-up their own capabilities to determine the fate and transport of the oil still coming up from the PRESTIGE. NOAA agreed to help and sent a trajectory expert after Christmas to work with Spain's team. The cleanup expert on the second team was also invited to Madrid to speak to the new Spanish Scientific Commission, which he did. NOAA is currently evaluating the level of our continued support to Spain. On December 18, NOAA Administrator, Vice Admiral Lautenbacher, along with the Commandant of the Coast Guard, met with the Prime Minister of Spain, to discuss our efforts in Spain and to receive his thanks for our continued presence. Vice Admiral Lautenbacher offered further technical assistance to Spain, and the Prime Minister accepted.

PREVENTION

Prevention of maritime disasters is hard to measure. It is difficult to attribute credit for accidents that do not occur. However, prevention must remain a priority. It is simply the best way to protect people, the economy, and the marine environment.

One way for government to aid in prevention is through regulation. This can include regulating the structural integrity, design, and manning requirements of vessels, such as phasing in a

requirement for double-hull tankers. Governments can also regulate vessel traffic, including creating vessel traffic lanes or designating certain sensitive areas off limits. Another regulatory option is to create financial disincentives to pollute, such as OPA, which requires responsible parties to pay the costs of the response and restoration, as well as penalties in certain circumstances.

The Federal government also facilitates safe marine transportation by providing mariners with vital oceanographic and meteorological information. The life-saving and economic value of this non-regulatory approach was recognized early in our history when President Thomas Jefferson authorized the Survey of the Coast in 1807. Today, NOAA is the major provider of geographic, oceanographic, and meteorological information about our coastal waters. NOAA's services include nautical charts, hydrographic and related surveys, tide and current predictions, and weather forecasts. Although, ultimately mariners are responsible for prudent navigation, NOAA takes seriously its responsibility to provide them with accurate, up-to-date information so that their decisions are well informed.

New technologies are aiding in providing advanced services that meet the needs of modern navigation, including Electronic Navigational Charts (ENCs) and the Physical Oceanographic Real Time System (PORTS). PORTS supports safe and cost-efficient navigation by providing ship masters and pilots with accurate real-time information necessary to avoid groundings and collisions. PORTS includes centralized data acquisition and dissemination systems that provide real-time water levels, currents, and other oceanographic and meteorological data from bays and harbors to the maritime user community. NOAA ENCs support real time navigation, as well as collision and grounding avoidance needs of the mariner, and accommodate a real-time tide and current display capability that is essential for large vessel navigation. NOAA ENCs also provide fully integrated vector base maps for use in geographic information systems (GIS) that are used for coastal management or other purposes. A report by the Woods Hole Oceanographic Institution's Marine Policy Center concluded that ENCs and other new technologies could yield a higher cost-benefit ratio than double hull tankers.³

Data from NOAA weather buoys and water level stations also support a backbone of observations in support of an Integrated and Sustained Ocean and Coastal Observing System. PORTS represents a practical application of such a system in support of safe and efficient maritime commerce. Of course, every accident avoided also supports NOAA's responsibilities as a trustee, steward and manager of marine resources by preventing harm to ocean and coastal waters and living marine resources. In addition to enhancing safety and stewardship, this data also promotes more efficient movement of goods. This can provide significant national economic benefits, including supporting the competitiveness of U.S. exports in an increasingly global marketplace.

³ Hauke L. Kite-Powell, Di Jin, and Scott Farrow, Expected Safety Benefits of Electronic Charts and Integrated Navigation Systems, May 1997.

I would like to add at this point that an interagency task group at the National Science and Technology Council is planning an international Earth Observation Summit for this coming summer, and has asked NOAA, along with NASA, to coordinate the interagency planning effort. This event will highlight the need for a comprehensive data collection system, which will complement the existing ocean, coastal and terrestrial observation systems.

PREPAREDNESS

Even as we seek to prevent maritime accidents, we must be mindful that they can and will occur. How prepared we are to respond in such instances can prevent loss of life and mitigate the degree of environmental and economic harm. The bottom line is that without adequate preparation, a response cannot be effective. The Coast Guard's Incident Command System provides a framework to organize decision-making, understand response strategies, and establish mechanisms for evaluating tradeoffs among response approaches.

In preparation for and in actual response to marine emergencies, NOAA brings valuable expertise, which is readily available to respond to accidental spills as well as deliberate acts of sabotage and threats to homeland security. This expertise includes oceanographers, meteorologists, chemists, biologists, and others who have focused on better understanding the behavior of marine oil and chemical releases and reducing the risks to resources. Examples of services NOAA provides include:

1. The Environmental Sensitivity Indexes, which are maps depicting the location of vital natural resources. This information improves the ability to make strategic response decisions.
2. The Trajectory Analysis Planner helps predict spill movements, which supports strategic placement of response resources.
3. The NOAA Guide to Seafood Safety supports decision making on fisheries that may be impacted by an event.
4. NOAA also provides training and participates in joint drills and related activities to enhance our capabilities for responding to spills and conducting natural resource damage assessments.

Improving the ability to respond to a spill was a major focus following the EXXON VALDEZ catastrophe. This included the formation of industry cooperatives and companies specializing in spill preparedness and clean up. Unfortunately, over time many of these companies have gone out of business or merged, reducing the national investment in research and development.

RESPONSE

When an incident does occur, NOAA's primary role in a response is to mitigate damage to public health, property and the marine environment and resources by providing scientific support to response agencies. A successful response is dependent on an agency's response capability;

and NOAA has made a conscious effort to implement a disciplined, agency-wide capability. Since 1994, NOAA has responded to 896 spill incidents.

NOAA's first efforts involve assessments of a spill's behavior, focusing on immediate health and safety issues for on-scene responders and the public. NOAA offices begin providing regular weather forecasts, tide and current predictions, oceanographic modeling, and analysis of how these may impact the trajectory and related aspects of the event. Experts from NOAA undertake efforts to understand the threats to living marine resources. The need to deploy vessels, aircraft, and instruments, such as tide gauges, is assessed.

RESTORATION

Under the Oil Pollution Act of 1990 (OPA), NOAA is responsible for assessing and restoring coastal and marine resources injured by oil spills. NOAA is also responsible for developing and maintaining regulations under OPA that guide Federal, state and tribal natural resource trustees in their efforts to conduct natural resource damage assessments. When oil threatens and injures coastal and marine resources, NOAA arrives on-scene to take samples of oiled natural resources and collect other information about injuries to natural resources and the services they provide. This information is used in the damage assessment and for restoration planning. NOAA provides multi-disciplinary teams of scientists, economists, and attorneys that work collaboratively with other natural resource trustees to determine the injury to coastal resources and the restoration required to address those injuries.

NOAA also places a high priority on working cooperatively with the parties responsible for the released oil--government and industry working cooperatively can reduce transaction costs and expedite restoration of the injured resources. NOAA has conducted natural resource damage assessments and restoration projects for oil spills across the country, including Alaska, California, Florida, Hawaii, Louisiana, Maine, Maryland, New Jersey, Oregon, Rhode Island, Texas, and Washington. Through these authorities and cooperative efforts, NOAA successfully restores natural resources across the nation and ensures the long-term health of coastal and marine resources.

CONCLUSIONS AND RECOMMENDATIONS

In order to build upon improvements in prevention, preparedness, response and restoration, NOAA offers the following recommendations:

1. Implement advanced charting technologies and navigation information systems. Support for safe and efficient marine transportation should be a priority of a coastal observing system.
2. Institutionalize and improve coordination of research and development between government and industry.

3. Continue efforts to review potential impacts from tankers and other vessels on the ocean environment. Such efforts should include working through the International Maritime Organization.
4. Maintaining a regular schedule of periodic training and drills for oil spill response is absolutely essential.
5. Senate assent and U.S. ratification of the Law of the Sea Treaty would strengthen the position of the United States in addressing global ocean issues.

Thank you and I look forward to answering any questions.